**REMARKS**

The Office Action dated April 6, 2004, has been received and carefully considered. In this response, claims 21-26 have been added, claims 1, 9, 11 and 13 have been amended, and the pending figures have been replaced with formal figures. Entry of added claims 21-26, the amendments to the claims 1, 9, 11 and 13, and the formal figures, is respectfully requested. Reconsideration of the outstanding rejections in the present application is also respectfully requested based on the following remarks.

Applicants note with appreciation the indication on page 13 of the Office Action that claims 5, 6, and 15 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have opted to defer rewriting the above-identified claims in independent form pending reconsideration of the arguments presented below with respect to the rejected independent claims.

I. THE INDEFINITENESS REJECTION OF CLAIMS 1 and 9

On page 2 of the Office Action, claims 1 and 9 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention. Applicants have amended claims 1 and 9 as

shown in the Appendix A, and respectfully request that the rejection be withdrawn.

II. THE OBVIOUSNESS REJECTION OF CLAIMS 1, 4, 7-13, AND 16-20

On page 3 of the Office Action, claims 1, 4, 7-13, and 16-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Banerjee *et al.* (IEEE Communications Magazine, Vol. 39, Issue 1, January 2001, Pages 144-150) in view of Martin (U.S. Published Patent Application No. 09/861,167). This rejection is hereby respectfully traversed.

As stated in MPEP § 2143.01, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Further, as stated in MPEP § 2143.01, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested

by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). That is, "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970). Applicants respectfully submit that the pending rejections fail to demonstrate *prima facie* obviousness and must be withdrawn.

Regarding independent claim 1, the Examiner asserts that "Banerjee *et al.* also discloses flooding domain advertisements comprise (sic) representations of link types and available bandwidth information (Page 146, Col. 1, paragraph 3), where it would have been obvious to one of ordinary skill in the art at the time of the invention to include interface descriptor information in the representation of link types for representing the hierarchical LSPs and descriptor information in the representation of link types for representing the hierarchical LSPs and different network domains."

However, Applicants respectfully submit that the cited excerpt from Banerjee *et al.* fails to teach or suggest that "flooding domain information comprises checking an optical UNI interface type, an optical interface descripter, and available bandwidth, as expressly recited in independent claim 1. The cited excerpt merely states:

> Enhancements to the Open Shortest Path First/Intermediate System to Intermediate System

> (OSPF/IS-IS) routing protocols to advertise availability of optical resources in the network (e.g., generalized representation of various link types, bandwidth on wavelengths, link protection type, fiber identifiers).

Clearly, the cited excerpt fails to disclose "optical UNI interface type, an optical interface descripter, and available bandwidth," as recited in independent claim 1. Further, Applicants submit that the Examiner's statement that "it would have been obvious to one of ordinary skill in the art at the time of the invention to include interface descriptor information in the representation of link types for representing the hierarchical LSPs and descriptor information in the representation of link types for representing the hierarchical LSPs and different network domains" amounts to classic hindsight reconstruction. As stated above, to establish *prima facie* obviousness, the Examiner must present a prior art reference (or references) that, alone or in combination, teaches or suggests all the claim limitations. No reference has been presented that teaches or suggests "optical UNI interface type, an optical interface descripter, and available bandwidth" in the manner claimed. Without such a showing, Applicants respectfully submit, the pending obviousness rejection of independent claim 1 must be withdrawn.

The Examiner next contends that "Banerjee *et al.* discloses "that the LSPs are established using constraint-based routing techniques (Page 146, Col. 2, Paragraph 4), but do (sic) not disclose the specifics of checking flooding domain information of the link state advertisements to decide whether to broadcast or block propagation of the link state advertisement, and accepting or rejecting the request based on the flooding domain information." The Examiner asserts, however, that "Martin discloses OSPF protocol, with several types of LSAs that describe the state of the network interfaces, where the OSPF is used to define different network areas to limit the flooding of the entire system by not flooding certain LSA types to other areas (paragraphs 0040-0042)."

Applicants agree that Banerjee *et al.* does not teach or suggest the steps of checking flooding checking flooding domain information to decide whether to broadcast or block propogation of the link state advertisement," and "accepting or rejecting the request based on the flooding domain information." However, Applicants respectively submit that Martin fails to teach or suggest the steps of "checking flooding checking flooding domain information to decide whether to broadcast or block propogation of the link state advertisement," and "accepting or rejecting the request based on the flooding domain information."

In asserting that Martin discloses these limitations, the Examiner references the following excerpt from Martin:

> [0040] In the preferred embodiment, all ASBRs 58, internal area routers 62, and ABRs 70 of the autonomous system 52 communicate using the Open Shortest Path First (OSPF) protocol as an Interior Gateway Protocol (IGP). OSPF protocol, an IGP used to distribute routing information within a single autonomous system, uses flooding between routers to exchange link state advertisements (LSAs) describing the status of each router's network interface. These LSAs associated with the IGP are contained in each router's Management Information Base (MIB) and provide an accurate view of all the routers and networks in a particular area. The ASBR 58 of the first system 52 communicates with the ASBR 59 of the second system 54 using a non-OSPF protocol 60 as known in the art.
>
> [0041] There are several types of LSAs used by routers. Type 1 LSAs 72 are Router Link advertisements which are flooded in the area a router belongs to and describe the states of a router's link to the area. Type 2 LSAs 72 are Network Link advertisements which are flooded in the area a router belongs to describing the set of other routers attached to a particular network.
>
> [0042] OSPF uses areas to limit the flooding of the entire autonomous system and reduce network congestion. ABRs 70 receive Type 1 and 2 LSAs 72, but do not flood them on to additional areas 74 within the autonomous system 52. Instead, Type 3 LSAs 74 are Summary Link advertisements generated by Area Border Routers and describe intra-area routes. In addition, Type 4 LSAs 74 are Summary Link advertisements generated by Area Border Routers and describe routes to the Autonomous System Boundary Router(s). Type 5 LSAs 76 are originated by the Autonomous System Boundary Router(s) which are flooded throughout all areas of a particular autonomous system (except stub areas) and describe routes to routers outside the autonomous system. An autonomous system 52 may contain a stub area 80 which does not receive all type 5 LSAs 76. Instead, Type 7 LSAs 78 summarize and filter

> selected type 5 LSAs which are directed to stub areas. This further reduces network congestion in the stub area 80.
>
> See, Martin, Paragraphs 40-42.

Applicants respectfully submit, however, that the above excerpt fails to teach or suggest the steps of "checking flooding domain information to decide whether to broadcast or block propagation of the link state advertisement, wherein checking the flooding domain information comprises checking an optical UNI interface type, an optical interface descriptor, and available bandwidth," as required by independent claim 1. Moreover, the excerpt does not teach or suggest the step of "accepting or rejecting the request based on the flooding domain information," as required by independent claim 1.

Further, Applicants respectfully submit the Office Action fails to set forth a proper motivation to combine the disclosures of Banerjee *et al.* and Martin. The cited motivation is based on hindsight from viewing the claims of the present application. Thus, Applicants respectfully submit the Examiner has not met his burden to establish *prima facie* obviousness.

The remaining independent claims (e.g., claims 4, 16, and 20) recite related subject matter to independent claim 1, and are therefore allowable for reasons similar to those given above.

The dependent claims 2-3, 5-15, 17-19, and 21-26, are allowable at least by virtue of their dependency on the above-identified independent claims. Moreover, these claims recite additional subject matter which is not suggested by the documents taken either alone or in combination. For example, none of the cited references, either alone or in combination, teach or suggest "the step of checking a user status identifier prior to transmitting a link state advertisement and determining from the status identifier whether the user is out of service, busy, testing, or idle" as recited in dependent claim 21.

In view of the foregoing, it is respectfully requested that the aforementioned obviousness rejection of claims be withdrawn.

III. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Respectfully submitted,

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Date: July 6, 2004